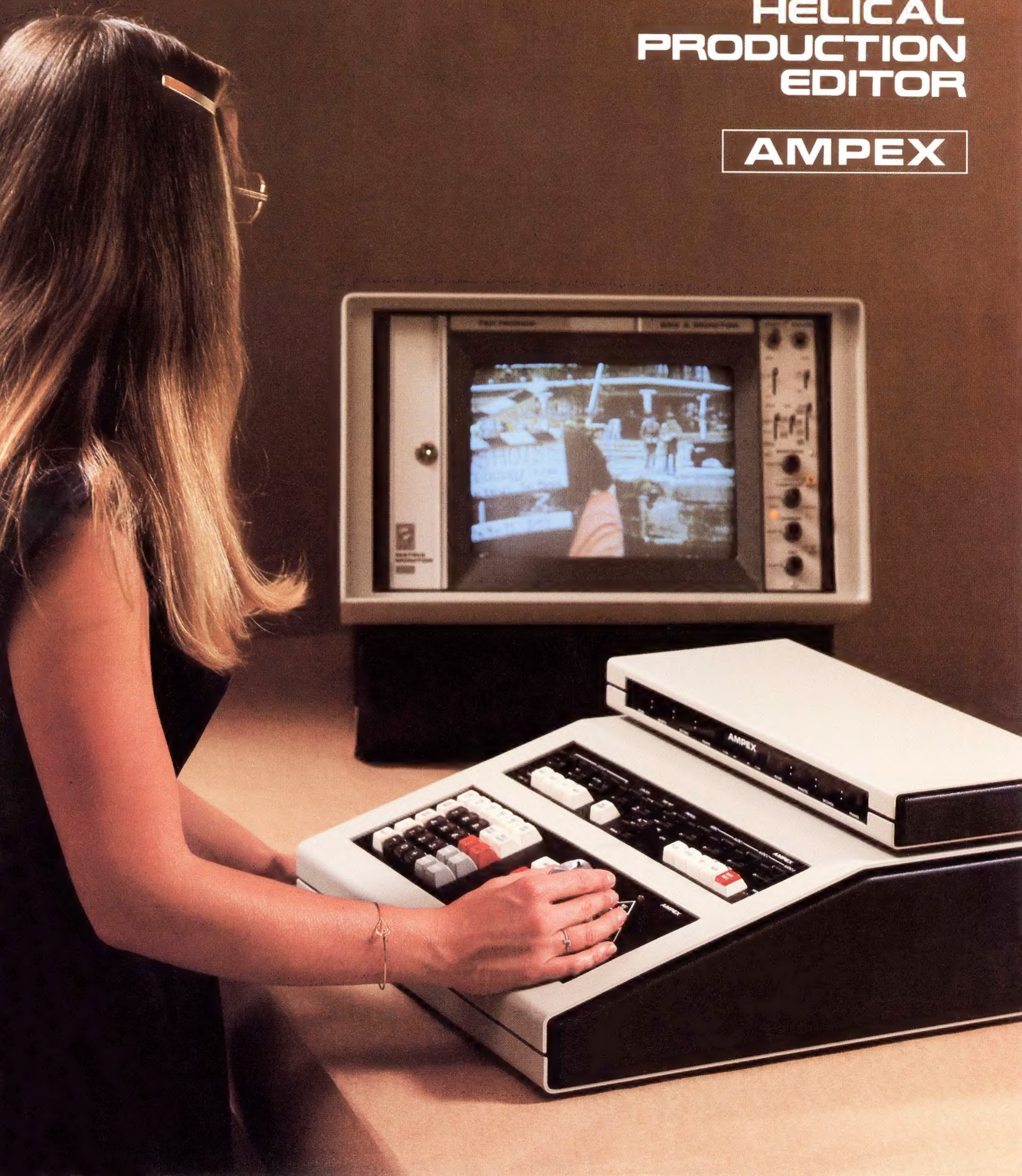


# HPE-1

HELICAL  
PRODUCTION  
EDITOR

AMPEX





# HPE-1 THE CREATIVE FOCUS FOR

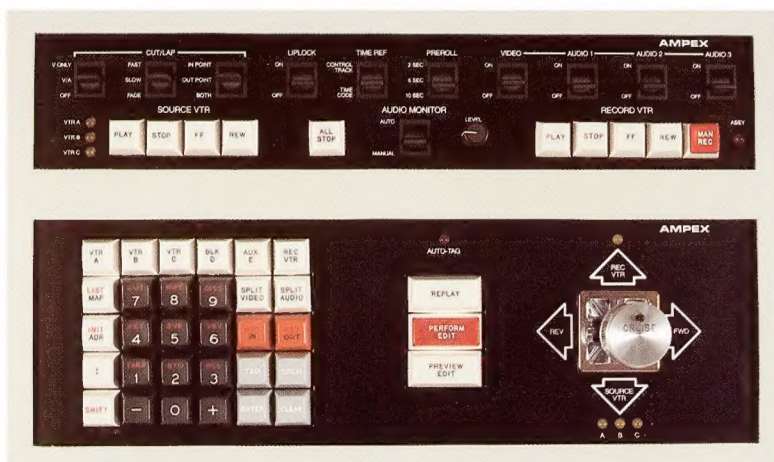


## Design Features

- Single location sit down editing control of up to 4 VPR series recorders
- Compact table top console incorporating a high degree of human engineering
- Advanced microprocessor-based circuitry for designed-in reliability
- Editing switcher/effects system

## Operational Features

- Joystick control of VTR speeds and functions
- Split-edit capability
- Automatic audio monitoring featuring a built-in speaker amplifier
- Adjustable preroll increment
- Automatic return to edit point eliminates separate shuttle and cueing functions
- Audio pitch control for intelligible audio monitoring at other than real time speeds
- Full insert edit capability with frame adjustable edit point trimming
- Automatic Dialog Replacement (ADR) option provides automated programmable voice-over editing
- SMPTE time code reader system with digital readout allows use of either control track or time code information
- Animate remote control option permits HPE-1 operation from an animate table location
- Edit decision lister option provides RS-232 compatible signal output for printer or punched tape record of editing data





# VPR-1 & 2 EDITING CONTROL

Ever expanding control over more and more complex equipment. That's what today's teleproduction business demands. The HPE-1 represents the newest in a sophisticated clustering of multi-functional controls uniquely suited to video tape editing with the Ampex VPR-1&2 recorders.

As a simplified editing control concentration, the HPE-1 provides maximum control and time-saving convenience for video tape editors using the world's most advanced 1" helical VTRs from Ampex.

Packed with human engineering to speed and simplify editing techniques, the HPE-1 almost leads you through an edit. The variable speed playback and shuttle capabilities of a VPR-1 or 2 are all controlled by an innovatively engineered joystick.

But editing control simplicity is only one feature of this new production tool. System design flexibility allows the user to specify any of a variety of configurations, choosing from options such as: single source programmable fades; soft wipes; A/B rolls; in and out edit point loading; simplified split edits; trimming; audio pitch compensation; automatic dialog replacement (ADR); the inclusion of an edit decision lister; store and recall of time codes; an animation accessory to name a few.

The HPE-1 is a compact, micro-processor-based table top editing control system for on- and off-line video tape editing with the 1" helical production VTRs that lead the way in versatility, the VPR series video recorders by Ampex. This editing console offers a greater variety of choices for a more imaginative end product. It can be combined with an optional editing switcher/effects system for an even greater range of sophistication.

Combine this precision control with the broadcast quality inherent in the VPR series recorders and you are ready to turn out productions characteristic of much more expensive systems.

## MULTI-LEVEL JOYSTICK

Variable play, shuttle and rewind speeds of the VPR-1 or 2 are all controlled by a multi-function joystick on the HPE-1. It's the heart of the HPE-1 control console because it places control of the unique variable slow motion and shuttle features of up to 4 VPR series video tape recorders at the operator's fingertips. The joystick controls transport selection, speed and direction. Move it forward to select the record VTR, right or left for forward or reverse shuttle, down to access any one of up to three source VTRs. But here's the interesting part: The amount or

angle of deflection of the joystick also controls the speed of the particular function selected. Hit the speed lock button on the joystick's knob and the speed of the machine selected remains constant. The joystick is then free to take control of another VTR. The ease and speed with which multi-source edits may be accomplished has to be seen to be believed.

## EDITOR CYCLE CONTROLS

Equally unique and representative of the time saving ability of the HPE-1 are the three large buttons called the editor cycle controls. Marked "Preview Edit," "Perform Edit," and "Replay," they automatically combine all the individual movements inherent in these operations, at a single command.

—**Preview Edit** accomplishes a complete preview cycle and returns the VTRs to their in-edit points.

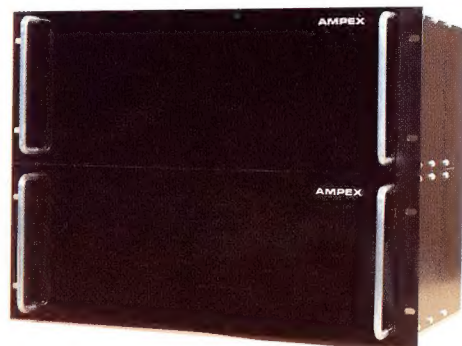
—**Perform Edit** when depressed together with Preview Edit executes an edit as previewed.

—**Replay** allows the rapid review of the edit.

With the combining of many functions into just these three powerful controls, sophisticated assembly of numerous video segments and special effects may be rapidly accomplished.

## SYSTEM FLEXIBILITY

The modular design of the HPE-1 incorporates backplane wiring with individual plug-in printed wiring assemblies, allowing any user to include the features that suit his special editing needs. A keyboard insert panel is available which enables the



operator to set in and out edit points and to trim edits by a selected number of frames from 1 to 99 in either a plus or minus direction.

The fully configured HPE-1 includes an expanded keyboard. This broader capability version provides selection and control of up to three source VTRs, split editing, tag and trim capability, in and out edit point loading, single machine previews (BVB & VBV), and A/B rolls. (A CRT display driver is included with the expanded keyboard option.) Other options controlled through the expanded keyboard are; the switcher/effects system; an edit decision lister; and an Automatic Dialog Replacement (ADR) unit. All options may be installed in the field, allowing a basic HPE-1 system to be upgraded to any level of sophistication desired.

With the HPE-1, editing time is shortened and artistic control of the program is increased. The potential of VPR series video recorders is given a creative focal point with the HPE-1 from Ampex.





# HPE-1 SPECIFICATIONS

## BASIC EDITOR

### PHYSICAL CHARACTERISTICS

Dimensions: 17" W x 5¼" H x 18½" D\*  
432 mm W x 133 mm H x 470 mm D  
Weight: 30 lb  
13.6 kg

### POWER REQUIREMENTS

Input Power: 2 amps @ 105-125 volts, 47-63 Hz  
1 amp @ 210-250 volts, 47-63 Hz

### AMBIENT OPERATING CONDITIONS

Temperature: 0° - 45°C  
Humidity: 10% to 90% RH (non-condensing)

\* Connector panel is on the rear apron. Allow minimum of 9" (229mm) for connectors and cable dressing.

Machine interfaces are available for VPR-1, VPR-2 and some ¾" cassette VTRs.

## TIME CODE READER ACCESSORY

### PHYSICAL CHARACTERISTICS

Dimensions: Standard 19" (483mm) rack mounting  
7" (178mm) high

### POWER REQUIREMENTS

Input Power: 1 amp @ 105-125 volts, 47-63 Hz  
0.5 amp @ 210-250 volts, 47-63 Hz

## AUDIO/VIDEO SWITCHER

### PHYSICAL CHARACTERISTICS

Dimensions: Standard 19" (483mm) rack mounting  
3.5" (89mm) high

### POWER REQUIREMENTS

Input Power: 0.3 amps @ 105-125 volts, 47-63 Hz  
0.2 amps @ 210-250 volts, 47-63 Hz

Unit provides one (1) video and two (2) audio inputs to each of five (5) sources. (VTR A, B, C, Auxiliary and black) for use with multi source system not requiring A-B rolls.

### VIDEO

Input Impedance: Bridging (5)  
Input Level: 1 Volt P composite (nominal)  
Output Impedance: 75 ohm  
Output Level: 1 volt P-P composite (nominal)  
Differential Gain: 1% at 1 volt P-P, 3.58/4.43 MHz  
Differential Phase: 1° at 1 volt P-P, 3.58/4.43 MHz  
Response: Flat to 5 MHz  $\pm$  0.5 dB

### AUDIO

Input Impedance: Bridging or 600 ohm switchable balanced (5)  
Input Level: 0 dBm (nominal)  
Output Impedance: 600 ohm balanced  
Output Level: 0 dBm (nominal)  
Response: Flat to 10 kHz  $\pm$  0.5 dB  
Total Harmonic Distortion: 0.5% at 10 kHz max.

## SWITCHER/EFFECTS SYSTEM

### PHYSICAL CHARACTERISTICS

Dimensions: Standard 19" (483mm) rack mounting  
7" (178mm) high

### POWER REQUIREMENTS

Input Power: 0.5 amps @ 105-125 volts, 47-63 Hz  
0.3 amps @ 210-250 volts, 47-63 Hz

Unit provides one (1) video and two (2) audio inputs for each of five (5) sources. (VTR A, B, C, Auxiliary and black).

Provides necessary connections for the time base correctors (not included) required for proper signal timing.

The Cut mode provides vertical-interval switching from one source to a second source.

The Dissolve mode provides dissolves between two sources with a programmable duration of up to 255 frames.

The Wipe mode provides 23 wipes of patterns from one source to another with a programmable duration of up to 255 frames. They may be programmed for either hard or soft edges and all effects are reversible.

The Key mode provides a fade-up, a fade-down or both of a keyed foreground into a background. The background may be faded from or to black. The fade durations are programmable for up to 255 frames and start of the keyed signal may be delayed for up to 255 frames from the start of the edit.

During all durations except background fade, the audio is dissolved from one source to the other.

### VIDEO

Input Impedance: Bridging (5)  
Input Level: 1 Volt P-P composite  
Output Impedance: 75 ohm  
Output Level: 1 Volt P-P composite  
Differential Gain: 3% at 1 volt P-P, 3.58/4.43 MHz  
Differential Phase: 3° at 1 volt P-P, 3.58/4.43 MHz  
Response: Flat to 5 MHz  $\pm$  1 dB

### AUDIO

Input Impedance: Bridging or 600 ohm switchable balanced (5)  
Input Level: 0 dBm (nominal)  
Output Impedance: 600 ohm balanced  
Output Level: 9 dBm (nominal)  
Response: Flat to 10 kHz  $\pm$  1.0 dB  
Total Harmonic Distortion: 1.0% at 10 kHz max.  
Drive Inputs Required:  
Horizontal Drive: 4 Volt P-P, 75 ohm  
Vertical Drive: 4 Volt P-P, 75 ohm  
Burst Flag: 4 Volt P-P, 75 ohm  
Composite Blanking: 4 Volt P-P, 75 ohm

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